

Docket No.: 5016 US  
Application No.: 10/621,741  
Date: September 5, 2006

Remarks

The Examiner has identified typographical errors in claims 2 and 3. These errors appear in the previously-submitted 37 CFR §1.121(c)(1) claims listing, but not in the application-as-filed; in fact, claims 2 and 3 as filed depend from claim 1 as the Examiner has correctly assumed. For this reason, the herein-submitted 37 CFR §1.121(c)(1) claims listing shows claims 2 and 3 as (Original) and as depending from claim 1. The undersigned sincerely regrets his error and thanks the Examiner for bringing this matter to his attention.

The Examiner has held claims 1 - 3 obvious over a combination of Ardelt '257 in view of Lehninger, Studier, Huang, and Gerrero. Ardelt is properly cited as teaching SEQ ID NO:1, Lehninger is properly cited as teaching the "codon dictionary", Studier is properly cited as teaching the use of T7 RNA polymerase to transcribe DNA and pET11d vectors, and Huang and Gerrero do indeed teach the use of pET22b vector. Nonetheless, the rejection of claims 1 - 3 is respectfully considered to be not well-taken, and reconsideration thereof is respectfully requested.

In re Deuel is properly cited for the proposition that disclosure of the amino acid sequence of a protein does not necessarily obviate particular DNA molecules that encode the protein. In the present instance, at least to the knowledge of the inventor as of the filing date, and on the state of the record, no one has ever produced DNA that encodes the SEQ ID NO:1 protein before, whether in pET11d vector, pET22b vector, or otherwise.

It is most respectfully pointed out that without a starting point such as is contained in applicant's disclosure, construction of a DNA molecule that would in fact encode the SEQ ID NO:1 protein would require undue experimentation. The prior art contains

Docket No.: 5016 US  
Application No.: 10/621,741  
Date: September 5, 2006

nothing indicating the number of oligonucleotides to be used, or the length of each, or the length of the overhang between complimentary oligonucleotides after annealing, or the number of mismatches between unfitting oligonucleotides, etc. But, with the benefit of applicant's disclosure, construction of such a DNA molecule is vastly easier. Once applicant has blazed the initial path, it will be much easier for persons of ordinary skill to construct alternates that arrive at the same destination.

In short, while every genetic engineer must use the same set of building blocks, there is seldom if ever any obvious way to use those blocks to construct a DNA molecule that will encode a desired protein. For this reason, claim 1 is considered allowable, and such allowance is respectfully requested. Claims 2 and 3 depend from claim 1 and are allowable for the same reasons.

Newly-added claim 57 is deemed allowable on the authority of In re Deuel, and no further discussion of this is considered necessary.

Issuance of a Notice of Allowability is deemed warranted, and is respectfully requested.

Respectfully submitted,

/Mark H. Jay #27,507/

Mark H. Jay, Esq.  
Reg. No. 27,507

Mark H. Jay, P.A.  
P.O. Box E  
Short Hills NJ 07078-0383

Customer Number: 20439

973-912-9066 (voice)  
973-912-0442 (facsimile)  
MHJ:cmm